

Vegetation Management
2901-12 Rivendell
Knoxville, TN 37922

800-979-8994

"For Chemical Emergency"

Spill, Leak, Fire, Exposure or Accident, Call:

Chemtrec (24 Hours): (800) 424-9300

Outside U.S., call collect: (703) 527-3887

MATERIAL SAFETY DATA SHEET

SECTION 1 - PRODUCT IDENTIFICATION

PRODUCT NAME: Prodiamine 65 WDG	CHEMICAL FORMULA: N3,N3-Di-n-propyl-2,4-dinitro-6-(trifluoromethyl)-m-phenylenediamine
CHEMICAL FAMILY: Dinitroaniline Herbicide	

SECTION 2 - HAZARDOUS INGREDIENT INFORMATION

Section 313 of SARA Title III: Ingredients subject to reporting are identified by asterisk (*)

CAS NO.	COMPONENT	%	ACGIH TLV	OSHA PEL (TWA)	OTHER
29091-21-2	Prodiamine	65	N/E	N/E	10 mg/m³ TWA
1332-58-7	Inert ingredients including: Kaolin Clay	35	2 mg/m³ TWA (respirable)	5 mg/m³ (respirable) 15 mg/m³ (total)	
14808-60-7	Crystalline Silica, Quartz		0.05 mg/m³ (respirable silica)	10 mg/m³/(%SiO₂+2) (respirable dust)	IARC Group 2
	Dispersing agent		N/E	N/E	15 mg/m³ TWA

SECTION 3 - PHYSICAL PROPERTIES

BOILING POINT: N/A	FREEZING POINT: N/A	BULK DENSITY 39-41 LBS/CU. FT.	VAPOR PRESSURE (mmHg) <5.6X10⁻⁶ @ 25°C (Prodiamine)
VAPOR DENSITY (Air = 1): N/A	% SOLUBILITY IN WATER: Dispersible		pH OF 1% SOLUTION: 7-9
APPEARANCE: Yellow Granules	ODOR: Odorless		% VOLATILE (BY WEIGHT) N/A

SECTION 4 - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT & METHOD: N/A	FLAMMABLE LIMITS IN AIR - LFL: N/A	UFL: N/A
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EXTINGUISHING MEDIA:

When product is involved in a fire use carbon dioxide, dry chemical, or foam. Water runoff can cause environmental damage. If water used to fight fire, dike and collect runoff.

SPECIAL FIRE FIGHTING PROCEDURES:

During a fire, irritating and possibly toxic gases may be generated by thermal decomposition or combustion. Remain upwind. Use positive-pressure, self-contained breathing apparatus and full protective clothing. Evacuate nonessential personnel from area to prevent human exposure to fire, smoke, fumes or products of combustion.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

This product is considered electrically conductive. Static electricity, mechanical sparks, open flames and certain hot surfaces (greater than 680° F [360° C] can serve as ignition sources for this material. This material can energetically decompose at approximately 383° F (195° C).

SECTION 5 - REACTIVITY DATA

STABILITY: **Stable under normal use and storage conditions.**

HAZARDOUS POLYMERIZATION: **Will not occur.**

HAZARDOUS DECOMPOSITION PRODUCTS: **Can decompose at high temperatures forming toxic gases.**

CONDITIONS & MATERIALS TO AVOID: **Thermal, mechanical and electrical ignition sources. Oxidizing agents.**

SECTION 6 - PROTECTIVE EQUIPMENT & EXPOSURE CONTROL METHODS

RESPIRATORY PROTECTION:

In areas with inadequate ventilation a NIOSH approved chemical cartridge respirator with organic vapor cartridges and pesticide pre-cartridges or a self-contained breathing apparatus may be required when working with this product.

VENTILATION	LOCAL EXHAUST: ADEQUATE	MECHANICAL: ACCEPTABLE	SPECIAL: NONE	OTHER: NONE
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PRODUCT NAME: VM PRODIAMINE 65 WDG

PROTECTIVE GLOVES AND BOOTS:	EYE PROTECTION:
Use chemical resistant gloves made of nitrile- or butyl rubber, neoprene, PVC or Viton	Use chemical splash goggles where eye contact is likely
OTHER PROTECTIVE CLOTHING OR EQUIPMENT:	WORK/HYGIENIC PRACTICES:
A NIOSH-certified combination air-purifying respirator with an N, P or R 95 of HE class filter and an organic vapor cartridge may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. If spraying overhead, use chemical-resistant headgear.	Avoid skin and eye contact. Wash thoroughly with soap and water after use. Remove and wash clothing contaminated with this product.

SECTION 7 - HEALTH HAZARDS

PRIMARY ROUTES OF ENTRY:			
Inhalation, skin, and eyes			
CARCINOGEN:	NTP:	CHRONIC/SUBCHRONIC TOXICITY:	TERATOLOGY:
Benign thyroid tumors (rat). None observed in mouse.	Not listed.	Liver (alteration and enlargement) and thyroid effects (hormone imbalances) at high dose levels (rats); decreased body weight gains.	Not a teratogen. Fetal toxicity at high dose levels where prodiamine also caused maternal toxicity (1 g/kg/day).

INHALATION:
Slightly toxic. Long term exposure to high concentrations of kaolin dust may produce x-ray evidence of dust in the lungs. Continued long term overexposure may affect respiratory function in some individuals. Exposure to dispersant can cause upper respiratory tract irritation (nose and throat). Inhalation LC50 (Rat) 1.81 mg/l – 4 hours.
EYE CONTACT:
May cause mild eye irritation. Degree of irritation will depend on the speed and thoroughness of the first aid treatment.
SKIN CONTACT:
Practically non-irritating. The Dermal LD ₅₀ in rabbits is >2,000 mg/kg.
INGESTION:
Practically non-toxic. Oral LD ₅₀ (rat) – >5,000 mg/kg.
ALLERGIC SKIN REACTIONS (Dilute mix):
Sensitizing (Guinea Pig). Prolonged or repeated exposure may cause skin irritation in some individuals.

SECTION 8 - EMERGENCY & FIRST AID PROCEDURES

EYE CONTACT:
Flush eyes thoroughly with water for 15-20 minutes. Remove contact lenses after initial 5 minutes and continue flushing for several additional minutes. If effects occur, consult a physician, preferably an ophthalmologist.
SKIN CONTACT:
Rinse skin immediately by washing with soap and plenty of water. Remove contaminated clothing. Launder clothing before reuse. Seek medical attention if irritation develops. Discard items, which cannot be decontaminated, including leather articles such as shoes, belts, and watchbands.
INHALATION:
Remove person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration; if by mouth use rescuer protection (pocket mask etc.). If breathing is difficult, oxygen should be administered by qualified personnel.
INGESTION:
Have a person sip a glass of water if able to swallow. DO NOT induce vomiting unless told to do so by a physician or poison control center. Do not give anything by mouth to an unconscious person.

PRODUCT NAME: VM PRODIAMINE 65 WDG

NOTES TO PHYSICIAN:

There is no specific antidote if this product is ingested. Treatment basis is the clinical symptoms presented by the patient.

SECTION 9 - SPILL, LEAK & DISPOSAL INFORMATION

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:

Small spill: Observe precautions in Section 6. Clean up spills immediately by sweeping up and place in a chemical container. Scrub area with hard water detergent (e.g., commercial products such as Tide, Spic and Span). Pick up wash water with a neutral absorbent (pet litter and the like) and place into compatible disposal container. Seal the container and handle in an approved manner. Prevent use of contaminated area and equipment until decontaminated.

Large Spill: Contaminated water can cause environmental damage. Keep out of streams and domestic water supplies. If water used to fight fire, dike and collect runoff to prevent contamination of local water sources.

WASTE DISPOSAL METHOD:

Do not contaminate food, feed, or water by storage or disposal. Wastes are toxic. Improper disposal of excess waste, spray mixture, or rinsate is a violation of federal law. Spray mixture or rinse water that cannot be used according to label instructions must be disposed of in accordance with applicable local, state, and federal requirements.

SECTION 10 – HANDLING

PRECAUTIONS TO BE TAKEN IN HANDLING:

Prevent eating, drinking, tobacco use, and cosmetic application in areas where there is a potential for exposure to the material. Wash thoroughly with soap and water after handling.

Bulk bags (FIBC) used to contain this material should be either type B or type C. If type C bags are used, make sure they are electrically grounded before powder is discharged from the bag.

Handle this material only in electrically conductive equipment. Electrically ground and bond this equipment as well as any worker who could contact a dust cloud formed of this material. Eliminate the presence of mechanical sparks and other ignition sources where dust clouds of this material could form.

SECTION 11 – ECOLOGICAL INFORMATION

FISH TOXICITY (Technical)	Not bioconcentratable in fish.
96 hour LC ₅₀ , Rainbow Trout	0.83 ppm
96 hour LC ₅₀ , Bluegill Sunfish	0.55 ppm
INVERTEBRATE (Technical)	
48 hour LC ₅₀ , <i>Daphnia magna</i>	0.66 ppm
Bee LC ₅₀ / EC ₅₀	>100 ug/Bee
AVIAN (Technical)	
Bobwhite 8-Day Dietary LC ₅₀	>10,000 ppm
Mallard 8-Day Dietary LC ₅₀	>10,000 ppm
MOVEMENT & PARTITIONING	
Immobile in various soils. Stable in water.	Solubility of technical in water is 0.013 ppm @ 77° F

PRODUCT NAME: VM PRODIAMINE 65 WDG

SECTION 12 - SHIPPING DATA

DOT SHIPPING DESCRIPTION:

DOT SHIPPING NAME:. Not regulated.

B/L FREIGHT CLASSIFICATION: Herbicides, NOI

INTERNATIONAL TRANSPORTATION:

IMO (vessel): Environmentally hazardous Substance, Solid, N.O.S. (Prodiamine 65%), Class 9, UN3077, PGIII (Marine Pollutant)

SHIPPING NAME: Quali-Pro Prodiamine 65 WDG

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) RATINGS:

Health 2

Flammability 2

Reactivity 1

Additional Labeling: None

SECTION 13 – REGULATORY INFORMATION

OTHER INFORMATION/PRECAUTIONS:

TSCA STATUS: All components are listed on US EPA TSCA inventory or are not required to be listed.

SARA 311 and 312: This product is a hazardous chemical under 29CFR 1910.1200, and is categorized as an acute, chronic health hazard and reactive hazard.

SARA 313 (40CFR355.30): N/A

CALIFORNIA PROPOSITION 65: Not listed.

SECTION 14 - SPECIAL PRECAUTIONS & STORAGE INFORMATION

SPECIAL INSTRUCTIONS:

PRECAUTIONS TO BE TAKEN IN STORAGE: Do not store or process above 320° F (160° C). Store material in a well-ventilated, secure area out of reach of children and domestic animals. Do not store food, beverages or tobacco products in the storage area.

Read and follow all label instructions before use. Avoid contaminating water. Do not reuse containers. Dispose of product containers, waste containers, and residues according to local, state, and federal health and environmental regulations.

COMMON ABBREVIATIONS THAT MAY HAVE BEEN USED: N/A = NOT APPLICABLE N/E = NOT ESTABLISHED

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